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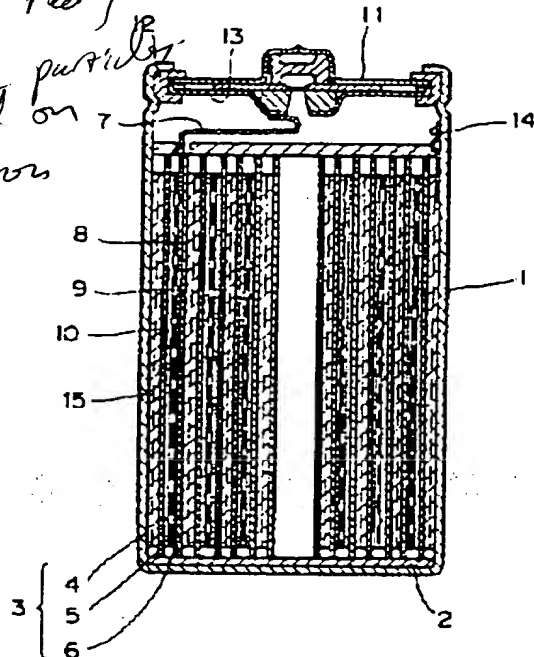
APPLICANT : TOSHIBA BATTERY CO LTD;

INVENTOR : INADA KUNIAKI;

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TITLE : SECONDARY BATTERY

C/SiO₂ layer on neg. elec
not really
SiO₂ particles
coated on 7
at interface



ABSTRACT : **PURPOSE:** To increase reliability during charge/discharge in a secondary battery, in which an active material is Li or alkaline metal composed mainly of Li, by constituting a negative electrode body especially of a carbonaceous material having specific H/C atomic ratio and crystal structure and an inorganic silicon compound.

CONSTITUTION: Li or alkaline metal composed mainly of Li is used as an active material. The chief ingredient of a positive electrode body 6 is transition metal oxide such as MnO₂ or V₂O₅, transition metals such, as LiCoO₂ and a compound oxide of alkaline metal. A negative electrode body 4 has a specific structure, and H/C atomic ratio is less than 0.15, and spacing (d_{002}) of (002) plane by means of an X-ray wide angle rotation method is 3.37 or more, and size L_c of crystallite in the C axial direction is 150 or less. A layer of a carbonaceous material containing Si or SiO₂ and/or the like by 0.05-1.2weight% is coated over the surface of the carbonaceous material. According to this constitution, a battery capacity is not reduced so significantly, so that a secondary battery having high reliability during charge/discharge can be obtained.

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